

From: [Tzhone, Stephen](#)
To: [Sanchez, Carlos](#); [Khoury, Ghassan](#)
Cc: [Rauscher, Jon](#); [Miller, Gary](#); [Villarreal, Chris](#)
Subject: FW: Advocates Fear EPA Cleanup Plan Shows "Backsliding" On Dioxin Standard
Date: Thursday, September 04, 2014 11:50:05 AM

Additional info from HQ.

From: Berg, Marlene
Sent: Wednesday, September 03, 2014 4:02 PM
To: Tzhone, Stephen
Subject: RE: Advocates Fear EPA Cleanup Plan Shows 'Backsliding' On Dioxin Standard

Steve,
You're welcome to forward my email.

In response to Carlos' question, HQ has been working for months with Region 5 regarding the rba and dioxin cleanup levels for the Tittabawassee River floodplain soils. I am including the response, directly below, that was sent to Region 5. Please note that our response to Region 5 underscores the fact that the rba and subsequent soil cleanup levels are based on site conditions at the Tittabawassee River floodplain.

Wed 5/28/2014 1:33 PM

Science Policy Branch Review of PRGs for the Tittabawassee Floodplain Soils

To: Tanaka, Joan <Tanaka.Joan@epa.gov>; Logan, Mary logan.mary@epa.gov

Cc: Berg, Marlene <Berg.Marlene@epa.gov>; Burgess, Michele
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Joan and Mary,

We appreciate the opportunity to review and provide comments on the Region's proposed preliminary remediation goals (PRGs) for Tittabawassee floodplain soils. Our comments are based on our review and subsequent discussions with your staff regarding your two submittals:
Development of Preliminary Remediation Goals/Action Levels for Human Direct Contact with Dioxin in Soil in the Tittabawassee River Floodplain Tittabawassee River, Saginaw River & Bay Site, Michigan
and *Tittabawassee River – Floodplain Site-Specific Soil Dioxin PRGs Tittabawassee River, Saginaw*



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River & Bay Site, Michigan, dated March 3, 2014. These comments assume that there will be continued consultation between Region 5 and OSRTI regarding dioxin cleanup decisions for the site.

Our comments on the proposed soil PRGs focused on how the Region applied site-specific exposure factors for Tittabawassee floodplain soils. The Region's application of a site-specific relative bioavailability factor (RBA) for dioxin in soil, as well as the other site-specific exposure factors, applies strictly to floodplain soils from segments 2 through 8 of the Tittabawassee River, contaminated as a result of releases from the Midland Plant. It is our understanding that these PRGs are only intended to be protective of human health and do not consider ecological risk.

The site-specific RBA, developed by Region 5, reflects the unique characteristics of Tittabawassee floodplain soils. The site-specific RBA was based on bioavailability studies using soil samples obtained from floodplain soils within segments 2 through 8 of the Tittabawassee River. In the same manner, the application of the other site-specific exposure factors reflects the unique characteristics of Tittabawassee floodplain soils.

Accordingly, we consider the site-specific human health PRG, based on direct contact, of 250 ppt TEQ for maintained-residential soil, and the site-specific soil PRG, based on direct contact, of 2,000 ppt TEQ for the other land uses (i.e. unmaintained land, agricultural land, the Shiawassee National Wildlife Refuge, park land, and commercial land) appropriate for floodplain soils at segments 2 through 8 of the Tittabawassee river. These site-specific PRGs are less stringent than the default Regional dioxin screening levels of 50.5 ppt TEQ for residential soil and 597 ppt TEQ for industrial soil (found at: http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/). However, in light of the site-specific considerations described above, we believe the Region has appropriately applied the best-available science for this site in deriving these site-specific human health PRGs.

If you have any questions or concerns, please do not hesitate to call me or Marlene Berg of my staff.

Michael

Michael Scozzafava, Chief